

Claims

1. An implantable prosthesis for repairing hernia defects, comprising a
basic structure (6) of meshed, in particular knitted, layer material (1)
5 which is deformable into a plug-type insert capable of being positioned
in the hernia defect, **characterized**
 - **in that** the basic structure (6) is a blank (10) of the layer material
(1) of a shape preferably ranging from round to oval, which is
placed in concertina pleats (3) that are parallel to a direction of ex-
10 tension (2); and
 - **in that** the basic structure (6), in its undeformed position of rest, is
approximately hourglass-shaped in a plan view.
2. A prosthesis according to claim 1, **characterized in that** the fixing
15 arrangement is a fixing thread (5) that is stitched through the pleated
layers.
3. A prosthesis according to claim 2, **characterized in that** the fixing
seam (4) that is formed by the fixing thread (5) runs crosswise of the
20 direction of extension (2) of the pleats and crosswise of the principal
plane (H) of extension of the undeformed prosthesis.
4. A prosthesis according to claim 2 or 3, **characterized in that** the
thread of layer material and the fixing thread (5) consist of the same
25 plastic material, preferably polypropylene, and have the same thread
thickness, preferably 100 dtex.

5. A prosthesis according to one of the preceding claims, **characterized in that** the basic structure (6) is fixed in its deformed, plug-type configuration by connection of adjoining lateral-edge areas (8).
- 5 6. A prosthesis according to claim 5, **characterized in that** the connection of the adjoining lateral-edge areas (8) is produced by a seam (9), preferably of the same thread material as the layer-material thread.
7. A prosthesis according to one of the preceding claims, **characterized**
10 **by** a metal-containing, continuous, biocompatible coating.
8. A prosthesis according to claim 7, **characterized in that** the coating is a titanium-containing coating of a thickness of less than 2 μm , preferably 5 to 700 nm.
- 15 9. A prosthesis according to one of the preceding claims, **characterized in that** the layer material (1) for the basic structure (6) is laser-beam cut to size.
- 20 10. A prosthesis according to one of the preceding claims, **characterized in that** two basic structures (6) are placed crosswise one on top of the other and joined to each other.
- 25 11. A prosthesis according to one of the preceding claims, **characterized in that** the blank (10), not yet pleated, of the basic structure (6) has an outer contour ranging from round to oval with a constriction (11) of hourglass shape in the central area.